WHAT IS CLAIMED IS:

1. In a printer using a single scanning mirror, a method of doubling the printing speed comprising the steps of:

providing a light beam;

providing a moving photosensitive medium sensitive to said light beam;

intercepting said light beam at the reflecting surface of a scanning mirror and redirecting said light beam toward said moving photosensitive medium;

oscillating said scanning mirror to sweep said light beam back and forth across said moving photosensitive medium;

generating digital signals for modulating said bi-directional light beam as said light beam sweeps across said moving photosensitive medium to control addressable pixels comprising an image line of a selected image; and

moving said photosensitive medium substantially orthogonal to said oscillating modulated light beam such that successive bi-directional image lines combine to form said selected image.

2. The method of claim 1 further comprising positioning said scanning mirror such that said back and forth motion of said light beam across said moving photosensitive medium tracks along a substantially balanced zig-zag path.

3. The method of claim 1 wherein said step of generating digital signals and said step of moving said photosensitive medium are coordinated to generate said addressable pixels at a selected vertical pixel rate.

4. The method of claim 3 wherein said selected vertical addressable pixel rate on said medium is at least 600 pixels per inch.

5. The method of claim 4 wherein said size of at least 600 pixels per inch is at least 1200 pixels per inch.

6. The method of claim 5 wherein said size of at least 1200 pixels per inch is at least 2400 pixels per inch.

7. The method of claim 3 wherein said step of modulating said light beam to control said addressable pixels comprising an image line occurs within left and right limits on said photosensitive medium and wherein the speed for moving said photosensitive medium orthogonal to said beam sweep and the spot size of said laser beam are selected such that laser spots of adjacent image lines located between said left and right limits overlap.

8. The method of claim 1 further comprising the step of selecting said light beam to have a spot area of at least three times said addressable pixel area such that adjacent "ON" pixels create overlapping beam spots on said moving photosensitive medium.

9. The method of claim 1 wherein the step of oscillating said scanning mirror comprises the step of oscillating said scanning mirror at a resonant frequency of said mirror.

10. The method of claim 1 wherein said step of intercepting said light beam at the reflecting surface of a scanning mirror comprises the step of intercepting said light beam with a scanning mirror having torsional hinges made of single crystal silicon.

11. The method of claim 10 wherein said scanning mirror is a multilayered mirror driven at a resonant frequency by a magnetic source.

12. A high quality printer comprising:

a laser light beam for creating a spot area on a photosensitive medium;

a moving photosensitive medium sensitive to said light beam;

a scanning mirror for interrupting said light beam and redirecting said light beam toward said moving photosensitive medium;

a mirror drive for oscillating said scanning mirror to sweep said light beam back and forth across said moving photosensitive medium;

circuitry for generating digital signals for modulating said light beam as said light beam sweeps across said photosensitive medium to control addressable pixels comprising image lines representing a selected image, said digital signals being generated at a selected rate;

circuitry for receiving said generated digital signals and for modulating said sweeping light beam in both directions; and

a drive source for continuously moving said photosensitive medium substantially orthogonal to said sweeping light beam to produce image lines at a said selected rate.

13. The printer of claim 12 wherein said moving photosensitive medium is a rotating drum.

14. The printer of claim 12 wherein said scanning mirror is supported by a pair of torsional hinges.

15. The printer of claim 14 wherein said pair of torsional hinges are formed from a single crystal silicon.

16. The printer of claim 15 wherein said scanning mirror is a multilayered scanning mirror.

17. The printer of claim 12 wherein said scanning mirror oscillates at the mirrors resonant frequency.

18. The printer of claim 17 wherein said resonant frequency is between about 3000 and 4000 Hz.

19. The printer of claim 12 wherein said image lines are a balanced zig-zag with respect to a horizontal line across said photosensitive medium.

20. The printer of claim 12 wherein said drive source is a magnetic drive source.

21. The printer of claim 12 wherein said rate of generating said digital signals is selected to control at least 600 addressable pixels per inch.

22. The printer of claim 21 wherein said laser spot size on said photosensitive medium has an area of at least three times the area of an addressable pixel.

23. The printer of claim 12 wherein said image lines extend between a left and right limit, and the laser spots on consecutive image lines overlap.

24. A printer drive engine for intercepting a light beam and redirecting the light beam toward a moving photosensitive medium comprising:

a scanning mirror having a reflecting surface for interrupting said light beam and redirecting said light beam toward said moving photosensitive medium;

a mirror drive for oscillating said scanning mirror to sweep said light beam back and forth across said moving photosensitive medium;

circuitry for generating digital signals for modulating said light beam as said light beam sweeps across said photosensitive medium to control addressable pixels comprising image lines representing a selected image, said digital signals being generated at a selected rate; and

circuitry for receiving said generated digital signals and for modulating said sweeping light beam in both directions to produce an image on said moving photosensitive medium, said image lines of said image overlapping.

25. The drive engine of claim 24 wherein said scanning mirror is supported by a pair of torsional hinges.

26. The drive engine of claim 25 wherein said pair of torsional hinges are formed from a single crystal silicon.

27. The drive engine of claim 26 wherein said scanning mirror is a multilayered scanning mirror.

28. The drive engine of claim 24 wherein said scanning mirror oscillates at the mirrors resonant frequency.

29. The drive engine of claim 24 wherein said resonant frequency is between about 3000 and 4000 Hz.

30. The drive engine of claim 24 wherein said rate of generating said digital signals is selected to control at least 600 addressable pixels per inch.